

REMARKS

Claims 1-19 and 31-40 are pending in this application. Claims 20-30 are canceled herein. Claims 1, 2, and 6 have been amended and claims 31-40 are added herein. In view of these amendments and remarks, Applicant respectfully requests reconsideration of the claims.

Claims 5-8, 10, 11, 13, 16, and 17 were objected to but indicated allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim.

This has been accomplished in that new independent claim 31 includes all of the limitations of independent claim 1 and dependent claims 2 and 5. Therefore, it is submitted that new independent claim 31 is now allowable. New dependent claims 32, 33, and 34 are the same as original dependent claims 6, 10, and 16, which were indicated allowable, except they depend directly or indirectly from new dependent claim 31.

Likewise, new independent claim 35 includes all of the limitations of independent claim 1 and dependent claims 2 and 7, and is also now allowable. New dependent claims 36, 37, 38, and 39 are the same as original claims 8, 11, 13, and 17, which were also indicated as allowable, except they depend directly or indirectly from new dependent claim 35.

Claims 1-4, 9, 12, 14, 15, 18, and 19 were rejected under 35 U.S.C. 102(e) as being anticipated by Adan, or under 35 U.S.C. 103(a) as being unpatentable over Adan in view of Jasa, *et al.*

Applicant respectfully disagrees. However, to facilitate the prosecution, Applicant has made some minor changes to clarify and emphasize the clear differences, such that it is now very clear that the claims do patentably define over the references of record.

More specifically, it is now clear that the first, second and third N+ doped regions of each varactor element are located in the same N well. This is clearly not so for the embodiment

shown in FIG. 5 of Adan used by the Examiner for his 102 rejection. It is also now clear that the first, second and third N+ doped regions of the first varactor element are at the same first voltage, and likewise, the first, second and third N+ doped regions of a second varactor element are at the same second voltage. However, it is also clear that the voltage (first voltage) common to the N+ regions of the first varactor element is different than the voltage (second voltage) common to the N+ regions of the second varactor element. Again, this is clearly not taught by Adan.

In addition, it is further noted that the claims of the present invention require first and second *differential* varactor elements. The elements illustrated and discussed in the Adan reference are not *differential* varactor elements. Also, the present claims require a first gate for controlling the operation of the first and second N+ region and a second gate for controlling the operation of the third and the same second N+ region. FIG. 5 of Adan clearly shows that the second gate 25 of Adan controls the operation of the third N+ region (reference number 24) and a forth N+ region 23. This is also clearly different than the claimed invention.

It is also clear that Jasa, *et al.* in no way overcomes any of the shortcomings of Adan with respect to claim 1.

New claim 40 has been added to assure full coverage of Applicant's invention and includes all of the limitations of amended claim 1 as well as some of the limitations new in claim 5.

In view of the above, Applicant respectfully submits that the application is in condition for allowance and request that the Examiner pass the case to issuance. If the Examiner should have any questions, Applicant requests that the Examiner please contact Applicant's attorney at the address below. In the event that the enclosed fees are insufficient, please charge any additional fees required to keep this application pending, or credit any overpayment, to Deposit Account No. 50-1065.

Respectfully submitted,

19 June 2006  
Date

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